

February 6, 2012

## Natural Gas Trends

### Highlights

## CYBERSECURITY

Eddie Roberson, Ph.D., a past Chairman of the Tennessee Regulatory Authority, retired in 2011 with 36 years of public service as a state utility regulator. After his retirement, the National Regulatory Research Institute (NRRI) invited Roberson to author an article on a regulatory issue that keeps him awake at night. His immediate response: cybersecurity.



***“What more effective attack can there be on a country than to attempt to cripple its communications, energy, and water sectors?”***

Roberson recalls a day when the Federal Bureau of Investigation briefed the State of Tennessee’s Information Systems Council in executive session on the “significant” threat of cyberattacks, particularly attacks that could cripple utilities.

Roberson recommends the three-legged stool of utility regulation, including rates, service, and safety, be expanded to include cybersecurity, a relatively new threat to utilities. He applauds the National Association of Regulatory Utility Commissioners (NARUC) and its Critical Infrastructure Committee in sponsoring *Critical Infrastructure Commissioner Workshops* and *Cybersecurity Boot Camp* seminars. What should regulators do to ensure that utilities develop cybersecurity safeguards? Roberson addresses this question in his article, available at:

<http://www.nrri.org>.

*The Railroad Commission of Texas’ energy assurance team is planning to sponsor during the summer of 2012 a cybersecurity workshop for the oil and gas sector, pursuant to the terms of a federal grant.*

Photo: Courtesy of the Texas Department of Public Safety

### Data

- March Natural Gas Futures Contract (as of February 3), NYMEX at Henry Hub closed at \$2.499 per million British thermal units (MMBtu)
- March Light, Sweet Crude Oil Futures Contract (as of February 3), NYMEX at Cushing closed at \$97.84 per U.S. oil barrel (Bbl.) or approximately \$15.58 per MMBtu

### Last week: Texas, U.S. HDD lower than normal

For the week beginning 1/29/12 and ending 2/4/12, heating degree days (HDD) were lower than normal for Texas and the U.S. For the heating season (7/1/11 to 6/30/12), cumulative heating degree days were 20% below normal for Texas and 15% below normal for the U.S.

Source: [www.cpc.ncep.noaa.gov](http://www.cpc.ncep.noaa.gov)

HEATING DEGREE DAYS (HDD)				
City or Region	Total HDD for week ending 2/4/2012	*Week HDD + / - from normal	Year-to-date total HDD	* YTD % +/- from normal
Amarillo	142	-54	2437	-13%
Austin	44	-53	1075	-9%
DFW	53	-83	1316	-21%
El Paso	109	-18	1650	-9%
Houston	26	-64	721	-33%
SAT	30	-63	803	-29%
Texas**	52	-59	1115	-20%
U.S.**	140	-61	2346	-15%

\* A minus (-) value is warmer than normal; a plus (+) value is cooler than normal. NOAA uses 65° Fahrenheit as the ‘normal’ basis from which HDD are calculated.

\*\* State and U.S. degree days are population-weighted by NOAA.

### Last week: U.S. natural gas storage at 2,966 Bcf

For the week ending 1/27/12, U.S. working gas in storage decreased from 3,098 to 2,966 Bcf, compared to 2,380 Bcf in storage a year ago and compared to an average of 2,365 Bcf in storage during the 5-year period from 2007 to 2011. Working gas in storage in the producing region (which includes Texas) declined from 1,121 to 1,099 Bcf.

Source: [www.cia.doe.gov](http://www.cia.doe.gov)

U.S. WORKING GAS IN STORAGE				
Region	Week ending 1/27/12	Prior week	One-week change	Current Δ from 5-YR Average (%)
East	1,471	1,571	-100	+ 17.4%
West	396	406	-10	+ 22.6%
Producing	1,099	1,121	-22	+ 39.3%
Lower 48 Total	2,966	3,098	-132	+ 25.4%

Lower 48 states, underground storage, units in billion cubic feet (Bcf)

**Last week: U.S. gas rig count down 32 to 745**

The gas rig count for the U.S. was down 32 when compared to the prior week and down 166 when compared to 12 months ago. The U.S. total rig count was down 11 from the prior week, and up 258 when compared to 12 months ago.

Source: Baker Hughes

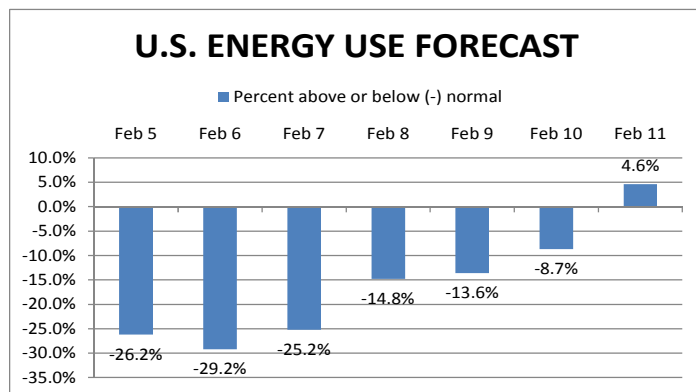
BAKER HUGHES ROTARY RIG COUNT				
	As of 2/3/12	+/- prior week	Year ago	+/- year ago
Texas	914	-3	750	+164
U.S. gas	745	-32	911	-166
U.S. oil	1245	+20	818	+427
U.S. total	1997	-11	1739	+258
Canada	710	+ 28	626	+84

Numbers are excerpted and not meant to be totaled

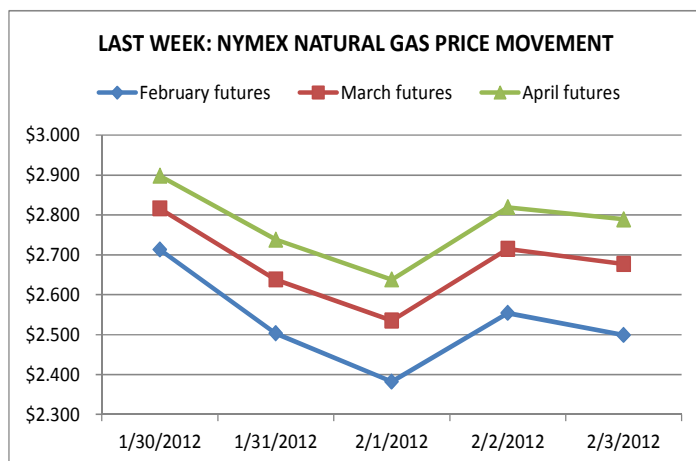
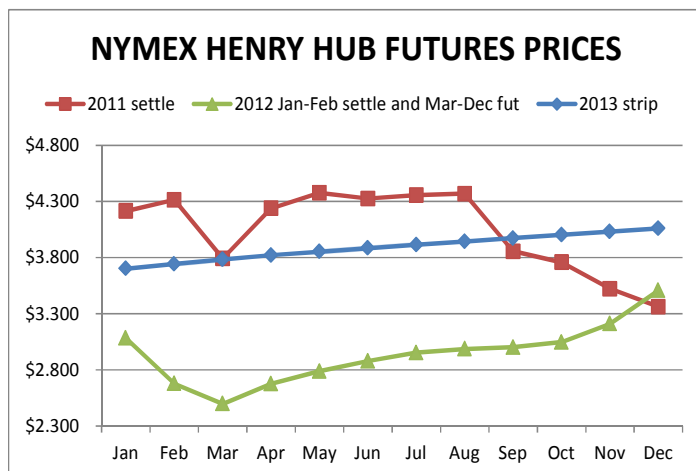
**This week: U.S. energy use mostly lower than norm**

U.S. energy use is forecasted to be lower than normal through Friday, according to the Dominion Energy Index, as shown below. Dominion forecasts total U.S. residential energy usage, a component of which is natural gas.

Source: Dominion Energy Index



**Strip prices.** Natural gas strip prices for 2013, shown below in blue, are the average of daily settlement prices for the next twelve months of natural gas futures contracts.

**NATURAL GAS PRICE SUMMARY AS OF 2/3/2012**

	This Week	+/- Last Week	+/- Last Year	12-Month Strip Avg.
US March futures				
NYMEX	\$2.499	-\$0.179	-\$1.294	\$3.070

*Lynne LeMon,  
a natural gas analyst  
in the Market Oversight Section  
of the Gas Services Division,  
is editor of  
Natural Gas Trends.*

*Comments on this publication  
may be directed  
to Ms. LeMon  
at 512-475-1958  
or [lynne.lemmon@rrc.state.tx.us](mailto:lynne.lemmon@rrc.state.tx.us)*